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SEARCH REQUEST FORM Scientific and Technical Information Center

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An Unit • Phone Nu	ımber 30	Senal Number	
Mail Box and Bldg Room Location	Resul	ts Format Preferred (circle)	: PAPER DISK E-MAII
f more than one search is submit		e searches in order of in	eed.
Please provide a detailed statement of the se nelude the elected species of structures, key utility of the invention. Define any terms the known. Please attach a copy of the cover sh	ywords, synonyms, acrony iai may have a special mea	ms, and registry numbers, and ining. Give examples or releva	combine with the concept or
Title of Invention			
Inventors (please provide full names):			
Earliest Priority Filing Date.			
For Sequence Searches Only Please include appropriate verial number	e all pertinent information (p	parent, child. divisional, or issued	patent numbers) along with the
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Schreiber, David

705875

From:

Sent:

Ramirez, Delia Wednesday, October 08, 2003 3:01 PM Schreiber, David case 09/856679

To: Subject:

Hi David,

I was wondering if you could do the following alignment. I need baa04770 gi474982 April 27, 1994 against seq id 2 and the corresponding DNA against seq id 31.

Thank you,

Delia M. Ramirez, Ph.D. Patent Examiner Recombinant Enzymes-Art Unit 1652 **USPTO** 1911 S. Clark Street, Crystal Mall 1, 10D06, Mail room 10D01 Arlington, VA 22202 (703) 306-0288 delia.ramirez@uspto.gov

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SEARCH REQUEST FORM

Scientific and Technical Information Center

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Art Unit Phone Num	ber 30	Serial Number	
Mail Box and Bldg Room Location	Results	Format Preferred (circle)	PAPER DISK E-MAIL
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Please provide a dictarled statement of the search	******	*************	ect matter to be searched
rease provide a neclarical statement of the sear include the elected species of structures, keywarthry of the invention. Define any terms that known. Please attach a copy of the cover sheet	ords, synonyms, acronyn may have a special mean	is, and registry numbers, and c ing. Give examples or relevan	ombine with the concept or
Title of Invention			
Inventors (please provide full names):			
Earliest Priority Filing Date.			
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BEST AVAILABLE COPY

Schreiber, David

5874

From: Sent:

Ramirez. Delia

Wednesday, October 08, 2003 5:29 PM

To: Subject: Schreiber, David case 09/856,679

Hi David,

I would like to request the following alignments:

AC004241 gi 2920325 Feb 1998 against seq id 31 AC004241 gi 3282154 July 1998 against seq id 31 AC004241 gi 3108007 May 2 1998 against seq id 31 AC004241 gi 3046263 Apr 13 1998 against seq id 31 AC004241 gi 3023023 Apr 4 1998 against seq id 31 AC004241 gi 3004524 Apr 1 1998 against seq id 31 AC004241 gi 2995474 Mar 28 1998 against seq id 31 AC004241 gi 2980958 Mar 21 1998 against seq id 31 AC004241 gi 2960506 Mar 14 1998 against seq id 31 AC004241 gi 2943840 Mar 7 1998 against seq id 31

Thank you,

Dera M. Ramirez, Ph.D.
Patent Examiner
Recombinant Enzymes-Art Unit 1652
USPTO
1911 S. Clark Street, Crystal Mall 1, 10D06, Mail room 10D01
Arlington, VA 22202
(703) 306-0288
delia.ramirez@uspto.gov

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RESULT 1
474982
LOCUS
DEFINITION
ACCESSION
VERSION
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KEYWORDS
SOURCE
ORGANISM
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AUTHORS
JOURNAL
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C3G protein.
474982
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                                                                                                                                                         Unpublished (1994)
Submitted (20-Oct-1993) to DDBJ by: Michiyuki Matsuda
1-23-1 Toyama, Shinjuku-ku
Tokyo 162
                                                                                                             Phone:
Fax:
                                                                                                                                                                                                                        Unclassified.
1 (residues 1 to 1077)
Tanaka, S.
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                                                                                                             03-5285-1111 x2625
03-5285-1150.
/product="C3G protein"
/function="ras guanine nucleotide releasing factor"
1..1077
                                                /organism-"unknown"
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/coded_by="D21239:131..3364"

Search completed: October Job time: 0.001 secs 8, 2003, 15:50:09

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RESULT 1
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domain of J. Biol. C
                                  Knudsen, B.S., Feller, S.M. and Hanafusa, H. Four proline-rich sequences of the guanine-nucleotide factor C3G bind with unique specificity to the first sequences.
                                                                                                                                                  C3G, a guanine nucleotide-releasing protein expressed ubiquitously, binds to the Src homology 3 domains of CRK and GRB2/ASH proteins Proc. Natl. Acad. Sci. U.S.A. 91 (8), 3443-3447 (1994)
                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                    GGAAGCTGTACTCCGCCCTCGAGAGGCTGCTGGATCCCTCATGGAACCACCGGGTATACC
                                                                                                                                                      TGGCGGCCCACCTCAAGGAGCAGAAGAATCTCAATTTCCTTTTTGCCGTCATGTTTTGGCC
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                                                                              TCAGCAACTCGGCCATCAGCCGGCCTAGCCCACACCTGGGAGGGGGCTGCCTCACAAAGTCC
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                                                          TGGACTCGGCGCCCATCCGCAGGCTGG - - - - - - AGTGGCAGAAGCAGACTTCAGAGGGCC
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VKDNSPPALTEKKRGSAPSFRVAVVAPMSRATSGSCSSLPVGLINRODEDVOCYAQRRL
SGGSHSYGGSESPRLSPCSSIDKLSKSDEQLSSLDNDSGOCSNRTSCETLDHVDPVDEF
LQQDLSNADQIPQTAMNLSPLPESLGESGSPFLGPPFQLPLGGHPQPDGPLAPGQOT
DTPPALDEKKRRSAASQTADGSGCRVSYERHPSQYDNI SGEDLQSTAP IPSVPYAPFA
AILPFQHGGSSAPVEFVGDFTAPESTGDPEKPPLPEKKHMLAYMOLLEDYSEPQ
SMFYQTFQNEHIYQQKNKLLMEVYGFSDSFSGVDSVQELAPPPALPPKQRQLEPPAGK
SGHPRDPSAVSGVPGKDSROGSERAFKSPDALESAGSEEEVDELSLIDHNELMSRLTL
KOGEDDGPDVRGGSGDILLVHATETDRKDLVLYCEAFLITYRTFISPEELIKKLQYRY
EKFSPFADTFKKRVSKNTFFVLVKVVDELCLVELTEELIKLLMELVFRLVCNGELSLA
RVLRKNILDKVDGKKLLRCATSSQPLAARGVAARFGTLHDFHSHELIREDCENLDAELF
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KIMKHLRKLNNFNSYLAILSALDSAPIRRLEWQKQTSEGLAEYCTLIDSSSSFRAYRA
ALSEVEPPCIFYLGLILQDLTFYHLGNPDYIDGKVNFSKRWQQFNILDSMRCFQQAHY
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ALRYFKTIVDKMAIDKKVLEMLPGSASKVLEAILPLVQNDPRIQHSSALSSCYSRVYQ
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="pC3G2"
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/note="1897-2047 bp: binding site f
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2630-3322 bp: guanine nucleotide releasing factor;
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131..3364
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Gaps

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Title:
Perfect score:
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ORGANISM
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                                                                               (residues 1 to 884)

(residues 1 to 884)

Kawasaki,H., Springett,G.M., Mochizuki,N., Toki,S., Nakaya,M.
Matsuda,M., Housman,D.E. and Graybiel,A.M.

A family of cAMP-binding proteins that directly activate Rapl 90074384
9856955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq
2 (residues 1 to 884)

Rowasaki,H., Housman,D.E. and Graybiel,A.M.

Direct Submission

Submitted (14-NOV-1996) Center for Cancer Research/Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, 77 Massachusetts Avenue, E17-540, Cambridge, MA 0213:
                                                                                                                                                                                                Rattus norvegicus
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                        norvegicus].
AAD12739
AAD12739.1 GI:4079657
locus RNU78167 accessi
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             SEQSLSTRSPASTWAYVQQLKVIDNQRELSRLSRELEP 338
                                                          HEGNHTLVENLINFEKMRMMARAARMLHHCRSHNPVPLSPLRSRVSHLHEDSQVARISTC
                                                                                                                                      REMRRENELQYWVATELCLCPVPGPRAQLLRKEIKLAAHLKEQKNLNSFFAVMFGLSNSA
                                                                                        ISRLAHTWERLPHKVRKLYSALERLLDPSWNHRVYRLALTKLSPPVIPFMPLLLKDMTFI 786
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                                                                                                                                                                                                                                                                                Conservative
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/note="GEF domain shows highest similarity
family; contains cAMP binding domain"
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1..884
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                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Rattus norvegicus"
/db_xref="taxon:10116"
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93.5%; Pred. No. 0;
11; Mismatches
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